



Product Data Sheet

Titanvene™ HM5420GA

Large Blow Moulding Container Applications

Titanvene™ HM5420GA is a high molecular weight polyethylene grade supplied in pellet form for use in large blow moulding applications. Titanvene™ HM5420GA is characterised by high melt strength, very high environmental stress crack resistance, very high impact strength, good rigidity and easy handling pellet form.

Applications

Titanvene™ HM5420GA is specialised for large blow moulding containers (L Ring Drum 200 Litres and above) for applications which require maximum toughness, i.e., containers requiring UN approvals for the packaging of dangerous goods.

Recommended Processing Conditions ⁽¹⁾

Titanvene™ HM5420GA can be easily processed on normal polyethylene blow moulding machines at temperatures in the range of 200°C to 240°C.

Food Contact Compliance

Titanvene™ HM5420GA can be used in food contact applications. Please contact your nearest PT. TITAN Petrokimia Nusantara representative for more detail of food contact compliance statements for the specific grade.

General Properties	Value ⁽²⁾	Unit	Test Method
Melt Flow Rate (190°C/21.6 kg)	2.5	g/10 min	ISO 1133 Condition 7
Nominal Density	949	kg/m ³	ISO 1183 Method D
Vicat Softening Point	127	°C	ISO 306
Melting Point	132	°C	ISO 3146 Method C

Mechanical Properties ⁽³⁾	Value ⁽²⁾	Unit	Test Method
Tensile Strength at Yield	25	MPa	ISO/R 527 Type 2 Speed C
Elongation at Break	1100	%	ISO/R 527 Type 2 Speed C
Charpy Impact Strength	30	kJ/m ²	ISO 179 Type 1 Notch A
Flexural Modulus	1400	MPa	ISO 178
Hardness (Shore D)	65		ISO 868, Type D
Brittleness Temperature	-75	°C	ASTM D746
ESCR Condition B, F50 (4)	>1000	Hours	ASTM D1693

(1) The optimum processing conditions can be different from one machine to the others, depend on the mould and part design.
(2) The values shown are typical values obtained by averaging a number of tests. Small divergences from the quoted figures may occur.
(3) Measured on compression molded plaques.
(4) Environment Stress Cracking Resistance 10% Igepal : CO-630

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